IN THE CLAIMS:

1. (Twice Amended) A method comprising:

infiltrating a solution containing a plurality of carbon aerogel precursors wherein the ratio of hydroxylated benzene compound to catalyst is less than 1000 into a preformed polymer foam, or fiber-mat;

allowing said solution to gel such that it encapsulates at least part of the preformed polymer foam or fiber-mat to form a gelled composite;

drying the gelled composite to form a dried composite; and, such that the surface tensile forces are reduced; and

pyrolyzing the dried composite <u>wherein the pre-formed polymer foam or fiber-mat and the carbon aerogel decompose simultaneously such that they remain essentially in contact at their interfaces to form a monolithic glassy carbon material <u>with a density less than 300 g/cc</u>.</u>

2-3. (Cancel)

- 4. (Previously Amended) The method of Claim 1, wherein allowing said solution containing a plurality of carbon aerogel precursors to gel is carried out at a temperature of 80°C and a time period of 110 minutes.
- 5. (Cancel)

6. (Cancel)
7. (Cancel)
8. (Previously Amended) The method of Claim 1, wherein pyrolyzing the dried
composite is carried out in a furnace in the temperature range of 700 to 1100 $^{\circ}\text{C}$ and for a
time period of 8 to 12 hours.
9-17. (Cancel)
18. (New) The method of Claim 1, wherein said drying is carried out by supercritical
carbon dioxide exchange.
19. Cancel